GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment

Air Quality Division



CHAPTER 2 TECHNICAL SUPPORT MEMORANDUM

TO

File

THROUGH: Stephen S. Ours, P.E.

Chief, Permitting Branch

FROM:

John Nwoke SSO FOR JCN

Environmental Engineer

SUBJECT:

MAACO Collision Repair & Auto Painting

Permit #6421-R1

Permit to Operate a Spray Paint Booth

DATE:

May 16, 2014

BACKGROUND INFORMATION

Reynolds II, LLC d/b/a MAACO Collision Repair & Auto Painting (MAACO) submitted an application to operate an existing paint booth at its facility located at 1913 Bladensburg Road, NE Washington, DC. The application was received on September 17, 2013 for one standard paint booth. This Chapter 2 permit is required to cover the operation of the existing paint.

The Air Quality Division (AQD) has determined that the facility is an existing source of paint stripping and surface coating because the applicant indicated that the facility was previously used for painting and stripping activities before MAACO took over the business under a new management. Thus the auto body painting activities occurred well before the December 20, 2010 start-up under MAACO. Based on observation at the time of inspection in 2010, the building appeared to have been used for auto painting for at least five years earlier, i.e., since 2005. This time frame is prior to September 17, 2007, the trigger date for classification of a source as a "new source" under 40 CFR 63, Subpart HHHHHHH. Subpart HHHHHHH is discussed further below.

The Company has not requested that any of the materials submitted with this application be held confidential.

The permit action will be published in the DC Register on May 16, 2014. Public comments for the permit action will be solicited through June 16, 2014.

DISTRICT DEPARTMENT OF THE ENVIRONMENT

green forward



CHAPTER 2 TECHNICAL MEMORANDUM

MAACO Collision Repair & Auto Painting
Permit #6421-R1 to Operate a Spray Paint Booth

May 16, 2014 Page 2

TECHNICAL INFORMATION

The equipment at this site includes one standard paint booth. There will be no use of methylene chloride (MeCl) at this facility. Only manual sanding is used to remove paints. The company uses high volume low pressure (HVLP) spray guns which are cleaned in an enclosed Gun Cleaning Station.

This facility is an existing source under 40 CFR 63, therefore the compliance date for 40 CFR 63, Subpart HHHHHH was January 10, 2011.

Note that: The United States Environmental Protection Agency (U.S. EPA), "Technical Support Document for Potential-To-Emit Guidance Memo, Tim Smith, USEPA/OAQPS. April 1998", suggests that the number of jobs performed per week by a single painting area spray booth or spray area at an auto body/repair shop would not exceed 25 jobs per painting station per week and volatile organic compound (VOC) emission factor of 9 pounds per job. This is equivalent to a potential-to-emit of 5.85 tons of VOC per year.

REGULATORY REVIEW

Chapter 2, Section 200: General Permit Requirements:

An auto body spray paint booth is a potential air pollution source since most most-auto body paint contains volatile organic compounds. Thus a Chapter 2 permit is required.

Chapter 6: Particulates:

The visible emission limitation of 20 DCMR 606 is applicable to this facility. Proper operation of the equipment would preclude any visible emissions, even during startup or shutdown, so Condition II(d) requires that no visible emissions be emitted- a more stringent requirement under 20 DCMR 201.

Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants

The requirements of 20 DCMR 700 were not included in the permit. The facility is regulated under 20 DCMR 718, which better covers the operations at this site. 20 DCMR 700 is not applicable when other sections of Chapter 7 are applicable to the same equipment.

The requirements of 20 DCMR 718 are applicable and have been included in the permit. The requirements of Section 718.3 are included in Condition II(b) of the permit. The associated monitoring requirements of Section 718.4 are found in Condition IV(b). A modified version of the paint application method requirements of Section 718.5 can be found in Condition III(a). Condition III(c), covering spray gun cleaning, contains a more stringent form of the requirements of Section 718.7 that is applicable to the site. The housekeeping requirements of Section 718.8 can be found in Condition III(e). The training requirements of that section can be found in Condition III(f)(1).

CHAPTER 2 TECHNICAL MEMORANDUM

MAACO Collision Repair & Auto Painting Permit #6421-R1 to Operate a Spray Paint Booth

May 16, 2014 Page 3

For all of these, appropriate record keeping requirements have been included in the permit.

Chapter 9, Section 903: Odorous or Other Nuisance Air Pollutants

"An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited [20 DCMR 903.1]" is applicable to all sources. It is contained in Condition II(b) of the permit.

Other Regulations

40 CFR 63, Subpart HHHHHH, "National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources" (also known as the "Auto Body MACT") is applicable to the facility. The compliance date of this regulation is January 10, 2011 since this is an existing source. Many of the operational requirements of this regulation are similar to those of 20 DCMR 718. However, there are substantial additional requirements.

To address the applicability of this regulation, it is indicated in the application that chemical paint strippers containing methylene choride are not used at the site. Thus, the requirements for paint stripping are generally not applicable in this case. Condition II(a) of the permit was developed to ensure that no methylene chloride containing strippers are used at the facility.

The paint spray both meets the requirements of 40 CFR 63.11173(e)(2)(ii). This requirement was included in the permit as Condition III(d)(3).

Condition III(d)(1) was written to allow the facility to use only exhaust filters with 98% or higher capture efficiency per 40 CFR 63.11173(e)(2)(i).

Condition III(a) of the permit was written to ensure compliance with the paint application technique specifications in both 20 DCMR 718.5 and 40 CFR 63.11173(e)(3). Similarly, Condition III(c) was written to ensure compliance with 40 CFR 63.11173(e)(4).

The training requirements of 40 CFR 63.11173(e)(1), (f), and (g)(3) were included in the permit as Conditions III(f)(2)-(4).

All applicable record keeping requirements were included in Condition V of the permit. It should be noted that records will be required to be kept for five years, rather than three per 20 DCMR 500.8, due to the more stringent five year requirement in 40 CFR 63.11178 and the difficulty of having two different document retention policies for federally required records and District-required records.

The notification and reporting requirements of 40 CFR 63, Subpart HHHHHHH are contained in Conditions VI(a)and (b).

CHAPTER 2 TECHNICAL MEMORANDUM
MAACO Collision Repair & Auto Painting
Permit #6421-R1 to Operate a Spray Paint Booth
May 16, 2014
Page 4

RECOMMENDATIONS

The proposed operation, as described in the application, and attached permit comply with all applicable federal and District air pollution control laws and regulations. Public comments for the permit action will be solicited from May 16, 2014 through June 16, 2014.

If no public comment has been received by the end of the comment period, it is recommended that Permit #6421-R1 be issued in accordance with 20 DCMR 200.2. However, if public comments are received, any emerging issues will be resolved before issuing the permit.

JCN